

RECENTLY PATENTED INVENTIONS.

Railway Appliances.

CAR COUPLING.—Marion M. Green, County Line, Tenn. This invention covers a novel combination and arrangement of parts designed to form a simple and effective car coupler which can be easily and quickly operated either from the top or sides of the car, thus obviating the necessity of going between the cars to couple them.

PNEUMATIC RAILWAY.—George W. King, Washington, D. C. This is a system in which a compressed air conduit is buried between the rails, having on its upper face a continuous slot, with devices between the car and the air tube whereby a continuous air pressure is supplied to the motor and undue friction avoided.

HOSE COUPLING FOR CARS.—Conrad Eckhard, Friend, Neb. The drawheads are provided with transverse passages registering with each other when the drawheads overlap, and there are valves in the passages with laterally extending automatically operated arms to project over the meeting edges of the drawheads, and other novel features, whereby the device automatically couples the ends of the hose when the two drawheads come together.

CATCH FOR CAR DOOR BRACKETS.—Ferlinand E. Canla, New York City. This is a gravity catch pivotally connected to a bracket arranged for connection with a car door, the catch being adapted to engage the ordinary bottom door track, which in this case becomes a keeper rail, the device being designed to obviate the difficulty sometimes experienced in opening freight car doors when the freight is lodged against the inner face of the door.

Mechanical.

COMBINATION TOOL.—Marion M. Green, County Line, Tenn. This is an implement designed to afford a simple and convenient saw set, wire cutter, leather punch, hammer and nail extractor, grippers for horse shoeing, wrench, pipe cutter, screw driver, etc., all in one tool, particularly adapted for use on farms having wire fences, and capable of being strongly and cheaply made.

SAW MILL DOG.—Alfred K. Miller, Millersport, Ohio. This device consists of a bar mounted to slide on a frame and carrying an adjustable hook, a gear wheel being mounted on the sliding bar and rack, being fastened on the main frame in which the gear wheel meshes, the dog when set being adapted to hold the log or lumber firmly in place on the saw mill carriage.

CAN CAPPING MACHINE.—Simon Lake, Baltimore, Md. In this machine the cans are fed to place and the caps held on them while the solder is cut and delivered to irons heated by a gasoline flame which distribute the solder along the margin of the cap and the surface of the can with which it contacts, the design being to greatly facilitate the work and reduce the labor of capping.

BORING MACHINE.—Charles H. Irwin, Frederick Mill, and John E. Hutch, Wilmington, Ohio. This invention consists of a shaft mounted to be shifted and carrying two gear wheels, a second shaft carrying two gear wheels being adapted to be thrown alternately in contact with the first gear wheels by shifting one of the shafts, to change the speed of the machine, to run slow when a large auger is used and run fast with a small auger.

BOLT HEADING DEVICE.—Emil Hubner, New York City. This is a device for use in connection with any bolt-making machine operated by a lever or treadle, and is designed to quickly head a bolt with the least possible manipulation of the rod from which the bolt is formed, while the sections of the gripper are interchangeable and each part is designed to be of maximum strength.

CLAMP.—William Carroll, Columbus, Ohio. This is a bench clamp for pattern, cabinet and box makers, and also for the use of stool makers, to hold the doors and other parts in place while fitting on pintles, hinges, etc., and consists of a spring-pressed rod held to slide in a casing, a head held on the rod, and a table held on the casing.

BOLTING REEL.—Riley A. Stubbs, Greenville, Ohio. Combined with the reel are transverse dividing boards through which the reel passes freely, there being a fixed rail on which the boards travel longitudinally, and gates held below and actuating the dividing boards, with other novel features, designed to prevent the accumulation of flour in the hopper and prevent leakage from the gates.

LOOM MECHANISM.—John Riddiough, Bloomington, Wis. This is a take-up mechanism in which the cloth beam has a ratchet and there is a breast beam in front of a reciprocating lay, combined with a lever having a pawl engaging the ratchet and a laterally extending pin, a rod being pivoted at its forward end to the lay and having a slot at its rear end to receive the pin, while a spring or weight throws the pawl lever forwardly to rotate the cloth beam.

Agricultural.

HARROW.—William S. McCord, Gratz, Ky. This invention is in the class of soil pulverizers having a series of convex-edged cutting blades instead of teeth, the improvement consisting in the form and arrangement of the blades or cutters, whereby they are adapted to cut, pulverize and turn the soil in a superior manner.

BAND CUTTER AND FEEDER.—Mike Ryman, Warner, South Dakota. This is a device for attachment to the rear end of a thrashing machine, embracing a knife shaft with fast rotary motion and a feed shaft with slow motion, and other novel features, to conveniently cut the bands of the sheaves of grain and distribute the latter equally to the beating drum of the thrashing machine.

CENTER CUT MOWERS.—George W. Sturm, Dana, Ind. This is an attachment especially adapted for use in winnowing clover, and is designed to keep the heads and leaves for a time out of contact with the ground and afterward deliver the cut clover in rows upon the ground in complete condition for the huller.

Miscellaneous.

METALLIC BUGGY BED.—William L. Dearth, Frankfort, Ind. This buggy bed is formed of a single piece or sheet of metal, cut at the corners, and the ends and sides bent up and the corners lapped and fastened by being brazed, riveted or bolted, being designed to stand hard usage better than is possible with a wooden vehicle bed.

OPERATING GAS ENGINES.—John J. Pearson, New York City. This invention covers a method of operating the engine by holding open the valve in the passage between the power cylinder and the reservoir when no explosions are required, and rendering the igniting apparatus inoperative, so that the contents of the power cylinder may pass freely into and out of the reservoir when the engine is running by its own momentum, thus avoiding undue absorption of power in the compression of the gases.

GASOLINE TANK.—Charles A. Rice, Philadelphia, Pa. This is a tank especially adapted for use as a reservoir for gasoline stoves, preventing leakage, and so made that, when the storage section is removed from its casing for refilling, the valves will be automatically closed, and when the section is replaced the valves will be automatically opened to the feed pipe of the stove.

ANTI-FRICTION BEARING.—Seely W. Ashmead, St. Louis, Mo. This is a ball bearing in which the base has recesses, each shaped to a section of a sphere, while there is an apertured covering for the base allowing a small section of the ball to project through each opening, the device being designed for use with railway rolling stock, on turntables, and with general machinery.

TILE KILN.—Henry Moehle, St. Mary's, Ohio. This is a kiln in which the deflecting and burner walls are connected with a series of burners passing longitudinally through and into the kiln, the burner walls being extended the entire width of the kiln transversely to the burners and connected with the deflecting walls, the burners extending outside of the main walls of the kiln, the fires being allowed to burn until the "water smoke" is seen, when the fires at the burners are weakened or strengthened as deemed necessary.

VEHICLE HAY LOADERS.—William A. Barber, Savanna, Ill. This is a device adapted for attachment to a hay wagon, whereby a hay loader may be coupled thereto or uncoupled therefrom by the operator when upon the load, whether the team be moving or standing still, the invention covering various novel features of construction and combinations of parts.

HEATING TIRES.—Luther Simmons, Buckner, Mo. This invention provides for a circular closed heating chamber, mounted on wheels, to receive the tires to be heated, and adapted to be readily located in proximity to a forge fire, with a hood and pipe to receive the blast from the fire and convey the gases and products of combustion around the interior of the chamber, discharging them thence through the forge flue, and is designed to save time and fuel.

TIRE TIGHTENER.—William A. Mayo, Paris, Texas. This invention consists of a plate having wedge-shaped projecting fingers and a rearwardly apertured extension, with other novel features, whereby, as the spokes of the wheel become loosened in their socket connection with the felly, they may be quickly tightened without disconnecting the spokes from the felly sections.

ORAR LOCK.—George N. Spaulding and Charles H. Eaton, Harrison, Me. This invention covers a simple and novel form of construction by which the orar may be readily locked in place to prevent longitudinal slip, while allowing a free sweeping action as well as a proper locking of the blade to feather it when necessary.

STORE SERVICE APPARATUS.—Edward A. Rorke, Brooklyn, N. Y. This is a buffer for double track store service railways, consisting of an automatically closing stop located between the track rails, and mechanism for opening the stop, by means of which the carrier will be effectively stopped and released to proceed on to an elevator or switching shelf.

MAIL BAG.—Charles Van Inwegen, Mongaup, N. Y. This is a pouch having a draw strap applied to its center, in combination with a grip comprising two blocks, each attached to the bag and hinged to each other and formed with square meeting faces normally held in contact with the draw strap by springs applied to the blocks.

LEAD PENCIL.—Lewis H. Sondheim, New York City. This invention relates to a class of pencils in which the lead or crayon is projected by a "step by step" movement as it is worn away by use, the invention being designed to provide a simple, efficient, and easily adjusted pencil of this kind.

PIPE ORGAN.—Romaine Callender, Brantford, Ontario, Canada. This is an instrument designed to permit the performer to set consecutive combinations of registers preparatory to execution of the music, and while playing the organ the several combinations can be produced consecutively without much physical exertion by the performer, so that the latter is enabled to pay more attention to the music score.

FINGER RINGS.—Joseph B. Bowden, and Hermann V. Bernhardt, Brooklyn, N. Y. This invention covers a machine for rapidly and accurately shaping finger and other rings to any desired size, the invention consisting of a grooved circular die mounted to turn and adapted to engage the outside of a ring to be rolled, and a second circular die traveling at differential rate of speed, adapted to engage the inside of the ring.

STAMP AFFIXING MACHINE.—John M. Mast, Cambridge, Pa. This is a machine for quickly and conveniently attaching postage stamps to envelopes, etc., and has a fixed knife in the rear of a head over which passes the strip of stamps, a device for feeding the strip forward at each upward stroke of the head, a swinging moistening device, and other novel features.

FENCE POST.—William H. Thomson, New York City. This is a post made of T-iron and apertured to receive anchor pins, provision being made for locking the anchor pins after they have been adjusted to place, the posts being quickly and readily set up without much digging and rigidly held against displacement.

SHOVEL AND SIEVE.—Edward Fleming, New York City. This is a combined implement consisting of a shovel having an open work bottom and a receptacle for dust and ashes detachably held thereto, both the shovel and ash receptacle tapering toward the front, enabling them when connected to be used as a shovel.

EXTENSION STEP LADDER.—John L. Wolf, New York City. This ladder is made in two or more sections, the extension sections of which are capable of closing upon the main or upper section to form a ladder of moderate length, or of sliding out from the main section together or singly to increase the height of the ladder.

WASH TUB.—Harriet Johnson, Brooklyn, N. Y. This invention provides means whereby the stationary wash tubs ordinarily in use in tenement or flat houses may be utilized for bath tubs when desired, the partitions being made removable and a locking device and packing strip employed in connection therewith.

MAKING ELONGATED TUBS.—Levi E. Flint, Ashby, Mass. This invention covers a method of making bathing tubs, etc., by first turning a round tub, then dividing it through its middle and uniting the half-round tub sections with an interposed bottom and sides and securing the whole together.

REVERSIBLE FEED MECHANISM FOR SEWING MACHINES.—Adolph Pettenkofer, Brooklyn, N. Y. Combined with the feed bar is a shaft having a cam for moving it lengthwise, and a cam for vibrating it automatically adjustable about the shaft, with a locking device for releasing and locking the automatically movable cam in adjusted circumferential position on its shaft, whereby the direction of the feed may be reversed without stopping the machine or altering the position of the material worked upon.

DISH WASHING MACHINE.—Thomas A. and Herbert W. Pugh, Sacramento, Cal. Combined with a water-holding chamber and a support for the articles to be washed is a revoluble shaft with a rotary brush, and other novel features, the invention being an improvement on a former patented invention of one of the same inventors.

BURGLAR ALARM.—John H. Bleoo, Brooklyn, N. Y. This invention provides a spring attachment to be set from the inside of a door or window, thus permitting the outward passage of an inmate of the house, but sounding an alarm should the door or window be opened after the setting of the alarm.

TROUSERS.—Emil E. Ehrmann, Terre Haute, Ind. These trousers have an improved back strap and means of securing it to the garment, whereby it will serve to tie the waistband to the body of the garment, and the two will not be parted when a severe strain is put upon the rear suspender buttons.

FIELD MOUSE TRAP.—Hermann Rippke, Ober-Faschkittel, near Olbendorf, Prussia, Germany. The frame of this trap has a pair of opposing spring arms and a vertical spiral spring, a plate being attached to one of the arms having a pointed forward end and a toothed opening, a lip at the rear end of the plate being detachably engaged with the other spring arm, the trap being readily fixed in position to prevent displacement by mouse-hunting animals and birds.

HECTOGRAPH PRINTING PRESS.—Henry H. Harrison, New York City, and Frederick C. Buffum, Stanton, Fla. This is a machine in which the hectograph material is applied to a cylinder or sleeve to be placed loosely on a printing or copying roller resting against the impression cylinder, whereby new copying cylinders may be readily supplied, the paper being fed from a reel and the sheets cut by shears as the paper issues from the machine.

ELECTRIC LOCKING ATTACHMENT.—Hermann J. Meyers, Brooklyn, N. Y. This invention provides means for retaining a door in open adjustment and for quickly closing and locking it by a push button or circuit closer at the rear of the counter or other suitable place, whereby the means of ingress or egress will always be under the control of an operator at any desired point at a distance from the door.

PORTABLE BOTTOM FOR COKE OVENS.—David Evans and Albert W. Adams, Pittsburg, Pa. This is an improvement on a formerly patented invention of the same inventors, providing a bottom which will permit the surplus water thrown upon the coke to cool it to flow off, and to facilitate the raising and lowering of the bottom, the bottom being lowered upon a car after the charge has been coked and moved bodily from the oven.

DRAUGHT REGULATOR FOR SHIPS' GALLEYS.—Ali Malekh, New York City. This invention consists of an air deflector and support combined with the exposed part of the galley pipe, the deflector being arranged to convert the back currents from the sails into a continuous draught, and also to catch the headway wind, giving a good draught in all directions of the wind, however the sails may be set.

ANCHOR ATTACHMENT.—Howard L. Moule, Rock Creek, Wyoming Ter. This is a clamping gravity block secured in place to embrace the crown and shank of the anchor, whereby the weight of the crown piece will be so increased as to insure the embedding of the flukes and proper retention of the anchor, increasing

light anchors in weight at a point where such increase will render the anchor more efficient.

WAGON BRAKE.—Noble E. Thompson, New Mayville, Pa. This is a brake with which the applied draught will automatically remove the brake shoes from the wheels as the wagon is drawn forward, and when descending an uneven surface the action of the horses in holding back will apply the brake shoes to the wheels, the brake shoes being thrown out of contact when the wagon is backed.

TRANSFERING APPARATUS.—William C. Hanson and Leonidas C. Ferrell, New Orleans, La. This invention covers a wagon truck with suitable restraining devices, a railroad truck with vertical standards, a derrick over the railroad truck with suitable lifting mechanism, and a wagon body detachably held on the wagon truck, to be bodily lifted on to the railroad truck, with other novel features.

SPOOL THREAD CABINET.—James W. Hayden, Lewisport, Ky. This cabinet has parallel series of spool-receiving compartments, with inclined chutes, and other novel features, wherein the spools cannot jam, and so that by pulling a numbered button a correspondingly numbered spool of thread will be delivered, provision being also made for the stowage of surplus spools, and conveniently returning spools that have been withdrawn.

SEWER GAS EXCLUDER.—Francis B. Herbert, Hoboken, N. J. This is an attachment for wash basins, comprising a buoyant waterproof flap with eyes along its upper edge and hangers adapted to fit in the uppermost overflow apertures of a basin and hold the flap over the apertures, the flap rising to permit the overflow of water, but keeping the apertures closed at other times.

CORSET FASTENING.—Thomas J. Brough, Baltimore, Md. In this fastening the busk has at its opposite ends positive keepers adapted to receive the end eyes, with spring-actuated latches, there being intermediate locks between the end locks, with other novel features, whereby the corset may be conveniently fastened and unfastened, and will not accidentally unfasten, one fastening not being liable to loosen as the others are being fastened.

FIRE CRACKER PISTOL.—George W. Ogle, Morgan Park, Ill. This is a breech loading toy pistol in which fire crackers may be used to project a harmless missile, its barrel and stock being made in one piece, with simulations of a sight piece, trigger and hammer, and the bore of the barrel communicating at its rear with an upwardly and outwardly curved loading aperture of less diameter than the bore.

SCIENTIFIC AMERICAN BUILDING EDITION.

MAY NUMBER.—(No. 55.)

TABLE OF CONTENTS.

1. Elegant plate in colors representing a tasteful cottage of moderate cost at Buffalo, N. Y. Perspective elevation, floor plans, sheet of details, etc.
2. Colored view of a residence at St. George, Staten Island, N. Y. Estimated cost \$20,000. Floor plans, perspective elevation, sheet of details, etc.
3. Stone residence, corner of St. Nicholas Place and 150th Street, New York city. S. Burrage Reed, architect.
4. New buildings at Eastgate and Bridge Streets, Chester.
5. Engravings of the residence of J. M. Johnson, Binghamton, N. Y. Perspective elevations and floor plans. Cost \$19,000 complete.
6. Perspective view of the office buildings of the Gotthard Railroad in Lucerne.
7. An English cottage. Perspective and floor plans.
8. A cottage recently erected at Binghamton, N. Y., cost complete \$8,800. Plans and perspective.
9. A residence in the Gothic style erected at New Brighton, S. I. Floor plans and perspective.
10. Excellent design of a country house recently erected at Belle Haven, Conn. Cost \$14,250. Oscar S. Teale of New York, architect. Perspective views and floor plans.
11. A double dwelling at Yonkers, N. Y., erected at a cost of \$8,000. Plans and perspective.
12. Residence of Chas. Kapps, Esq., at Stapleton, Staten Island, N. Y. Cost complete \$4,000. Perspective elevation and floor plans.
13. Cottage at Greenwich, Conn., erected at a cost of \$7,250 complete. Floor plans and perspective.
14. Miscellaneous Contents: High buildings.—Bad flues.—Imitation ebony.—Destruction of asphalt pavement by gas.—Art of building.—Improved dumb waiters, illustrated.—An improved skylight, illustrated.—Rogers miter planer, illustrated.—Dumb waiters and hand power elevators.—A fine window in the Convent of the Sacred Heart, illustrated.—Improved sash pulleys, illustrated.—A hot air and hot water heater, illustrated.—Colors for mortar.—Improved adjustable grooving head, illustrated.—An improved window screen frame, illustrated.

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